February-14-13 2:02:58 PM

QC

Quality Control

Item ID: D3137-5 Accept *N900040100* Setup Start **Revision ID:** Item Name: Washer **Start Qty: 20.00** *20* **Start Date:** 2/14/13 **Cust Item ID:** Required Date: 2/20/13 Reg'd Qty: 20.00 **Customer:** Reference: ----Start Date: 13-02-1 Run Tooling: **Process Plan:** Approvals: Date: Stop QC: SPC (Y/N): Date: Date: Sequence ID/ Operation Tool ID Set Up/ Tool# Plan Accept Reject Reject Insp. Work Center ID Description Qty Qty **Run Hours** Code Number Stamp Draw Nbr **Revision Nbr** D3137 Rev F 100 0.00 Hardinge CNC LATHE SMALL *100* Hardinge 0.00 13/02 /25 Memo Hardinge CNC Lathe Small 1-Machine as per Folio FA471 and Dwg D3137 2-Identify as D3137-5 3-Deburr 110 QC2- Inspect parts off machine FAI/FAIB 0.00 20 13/02/25 *110* Po QC 0.00 Memo Quality Control 120 QC8- Inspect parts - second check 0.00 13.2.25 *120*

0.00

Memo

									DQA:	Date:	<u> </u>
NCR: Yes	/ No				WORK ORDER NON-O	CONFORM	MANCE / UP	DATE	QA Closed:	Date:	
Work Order:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No.					Rework Scrap Use-as-is Work Order Update	Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet od. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling]	1					,				
Operator		•	İ								
Material											
Setup											
Other]										
Process											

Landing (Gear	General				
	Bending	Bend		Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route		Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged		Inspection Incomplete	Part Incorrect	Weld
	Crushed/Crimped.	Burrs		Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
	Cuffs	Contamination		Maintenance	Part Moved	 _
	Heat Treat	Countersink		Mislabeled	Positioned Wrong	 _
	Inspection Strip in Tube	Cut Too Short		Misread	Power Loss/Surge	Other
	Ripples in Bend	Drill Holes	Γ	Offset	-	
	Torque Waves in Extrusion	Drawing		Out of Calibration		
<u> </u>	Turning Sequence	Finish		Out of Sequence		

Outside Dimensions

FAULT CATEGORY

Wave/Twist in Tube

Folio

Supplier Training Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

February-14-13 2:02:58 PM

Item ID:

D3137-5

Accept

N900040100

Setup Start

Revision ID:

Start Date:

Item Name:

Washer

OC:

Start Qty: 20.00 2/14/13

20

Cust Item ID:

Customer:

Reference:

Approvals:

Required Date: 2/20/13

Process Plan:

Date:

Tooling:

Date:

Run

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

Operation Description

Req'd Qty: 20.00

Chemical Conversion Coat per QS1005 4.1

Set Up/ **Run Hours** Tool ID

Tool # Plan Code

Accept Qty

Reject Reject Qty

Insp. Number Stamp

130

130 HandFinish

Memo

0.00

0.00

Hand Finishing

140

QC

QC3- Inspect Part Finish

Memo

0.00

Quality Control

160

Identify as per dwg & Stock Location

160

Packaging Packaging

Memo

0.00

											DQA:	Date:	P
NCR:	⁄es	/ No				WORK ORDER NON-	COI	VFORM	VANCE / UP	DATE		-	
						()			P. 305.		QA Closed:	Date:	
Work Orde	ar.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orac	٠٠٠.				···	Rework	7		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	۷o.					Scrap	1		Machining	Small Fab	Pro	od. Eng. Coor.	Quality
	•					Use-as-is	1	Therm	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR 1	۷o.					Work Order Update]		Large Fab	Composite]	Supplier	
											,	•	
Root						ption of work order update	1	Initial		tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Cł	nief Eng	Desc	ription	Date	Verification	QC Inspector
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Equip/Tooling											}		
Operator													
Material													
Setup													
Other	Ш												
Process	Ш												
Supplier													.
Training													
Unapproved					<u> </u>		<u> </u>						
							AUI	LT CATE	GORY				
Landi					_	General		٦		_	٦		.
	\vdash	Bending				Bend	<u> </u>	Grain		<u> </u> -	Ovalized		Pressure/Forced
	_	Centre No	ot Concer	ntric to	o/s	BOM/Route	ļ	Hardwa		ļ	Over/Unde	<u> </u>	Temperature/Cure
	-	Cracks				Broken/Damaged	<u> </u>	₹	ion Incomplete	_	Part Incorre		Weld
	Щ	Crushed/0	Crimped.			Burrs	_	4	tions Incomplete/	/Unclear	Part Lost/N		Wrong Stock Pulled
	Ш	Cuffs				Contamination	<u> </u>	Mainte		ļ	Part Moved		
`	_	Heat Trea				Countersink	_	Mislabe			Positioned		٦
		Inspection	n Strip in	Tube	1	Cut Too Short		Misread	t		Power Loss	/Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

February-14-13 2:02:58 PM

Quality Control

Item ID: D3137-5 Accept *N900040100* Setup Start **Revision 1D:** Item Name: Washer *20* **Start Date:** 2/14/13 **Start Oty: 20.00** Cust Item ID: Required Date: 2/20/13 Req'd Qty: 20.00 *20* **Customer:** Reference: Run **Approvals: Process Plan:** Date: Tooling: Date: Stop QC: Date: **SPC (Y/N):** Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Reject Accept Insp. **Work Center ID** Qty Description Run Hours Qty Code Number Stamp 170 OC21- Final Inspection - Work Order Release 0.00 ME (3-2-26 *170* OC 0.00 Memo

NCR:	Yes	/ No				WORK ORDER NON-O	100	VFORM	MANCE / UPDATE		QA Closed:	Date:	· .
Work Ord	o r :					DISPOSITION			AG	AINST DE	PARTMENT,		
Work Orde Part I NCR I	٠ . No.					Rework Scrap Use-as-is Work Order Update		f Therm	Machining Sm.	sstube all Fab nishing posite	•	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					l .	ption of work order update	ì	nitial	Action		Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data	Ш												
Equip/Tooling	Ш												
Operator													
Material													
Setup													
Other													
Process											ļ		
Supplier													
Training													
Unapproved													
						F	AUI	T CATE	GORY				
Landi	ng G	iear				General		_			_		
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
		Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/M	issing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio DQA:

Part Moved

Positioned Wrong

Power Loss/Surge

Other

Date:

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

February-14-13 10:50:06 AM

Work Order ID:

97105

Parent Item:

D3137-5

Parent Item Name:

Washer

Start Date: 2/14/13

Required Date: 2/20/13

Start Qty: 20.00

Required Qty: 20.00

Comments: :

IPP A04.11.04New issueKJ/JLM

IPP Rev B 08.07.03 ECN1207 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.750 6061-T6 Round Bar .750"	···	Purchased	No			100	f	51.5180	0.0208	0.437894	Po	13/0	125
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT012		13	•						
				1207	34	13							
				MAT013		38.518			-				•
				1212	282	9.024							
				1220	81	26.494							
				1237 جــ	57	3				43			

											DQA:	Date:	
NCR: Y	'es	/ No				WORK ORDER NON-	COI	NFORN	AANCE / UP	DATE	QA Closed:	Date:	
144 - O -					<u>,, ., ., ., .</u>	DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Work Orde	-					Rework Scrap Use-as-is		Į r	Skid-tube Macnining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	No.				·	Work Order Update	1		Large Fab	Composite		Supplier	
Root Cause		Date	Step	Qty		ption of work order update		Initial nief Eng		tion cription	Sign & Date	Verification	QC Inspector
Doc/Data			-	3.7			+	Ü					· · · · · · · · · · · · · · · · · · ·
Equip/Tooling													
Operator											<u> </u>		
Material													
Setup													
Other			1									1	
Process													
Supplier													
Training			1										
Unapproved			<u> </u>								<u> </u>		
							FAU	LT CATE	GORY				
Landi	ng (Gear			_	General		7		_	7	[.
		Bending			<u> </u>	Bend	L	Grain		_	Ovalized		Pressure/Forced
		Centre N	ot Conce	ntric to (o/s _	BOM/Route		Hardwa			Over/Under		Temperature/Cure
	L	Cracks				Broken/Damaged	\perp	⊣	ion Incomplete	_	Part Incorre	 	Weld
		Crushed/	Crimped		L	Burrs	L	-1	ions Incomplete	/Unclear	Part Lost/M	_	Wrong Stock Pulled
		Cuffs				Contamination	L	Mainte			Part Moved		
		Heat Tre	at			Countersink		Mislabe	eled		Positioned \		7
1	1	Inchectic	n Strin in	Tuhe	1	Cut Too Short	1	Misread	d		Power Loss	/Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

DART AEROSPACE LTD	Work Order:	97/05
Description: Washer	Part Number:	D3137-5
Inspection Dwg: D3137 Rev: F		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
		L	

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.740	+/-0.010	740	/		UGAN	P40-01
Ø0.257	+0.005/-0.000	259	1		f.	* * *
Ø0.500 x 100°	+/-0.010	*2000 × (000°	V		64	*1
Ø0.360	+/-0.010	.360	V		٠-	41
0.080	+/-0.010	.081	1		V	11
0.200	+/-0.010	. 199	/		v	h
Ø0.650	+0.000/-0.010	.645	/		٧	Ł
					<u> </u>	

Measured by: 0	Audited by: 29	Prototype Approval:	N/A
Date: 13/02/25	Date: 3 · 2 -2	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.11.12	New Issue	KJ/JLM	
В	06.03.15	Ø0.650 dimension added; Ø0.660 dimension removed	KJ/JLM LA	
С	08.12.02	Dwg Rev updated	KJ/DD 🚓	<i>Y</i>

